

## **APPENDIX P**

# **LEACHATE QUALITY DATA AND GENERATION CALCULATIONS AND LEACHATE TREATMENT AGREEMENT**

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Sector 2 Leachate Analytical Data Summary Table (2013-2017)

Leachate Generation Calculations

Figure P-1 – Leachate Generation Calculation Areas

City of Chippewa Falls WWTP Leachate Agreement (10/31/2014)

Rice Lake and Chippewa Falls WWTP 2019 Invoices for SMCL Leachate Acceptance

**Environmental Sampling Corporation**  
**ADVANCED DISPOSAL SERVICES SEVEN MILE CREEK LANDFILL**

**Sector 2 Leachate Analytical Data Summary**

Leachate Tank 2	PARAMETERS															
	Inorganic/Metals															
	Alkalinity	Ammonia Nitrogen	TKN	Iron	Sodium	Cadmium	Lead	Manganese	Mercury	Chloride	Sulfate #	Hardness	BOD	TSS ##	Chromium	COD
DATE	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L
01/31/13	16,400	1,250	--	--	--	1.3 J	21.1	--	0.15 J	--	--	919	2,810	--	494	7,820
02/26/13	--	1,040	--	--	--	1.7 J	26.3	--	0.12 J	--	--	--	1,710	--	606	6,100
03/18/13	--	1,180	--	--	--	1.4 J	20.9	--	<0.10	--	--	--	1,490	--	489	4,690
04/23/13	2,720	445	530	39.2	1,100	1.0 J	10.0	2,860	0.24	1,110	--	1,040	2,700	--	120	4,420
05/30/13	-	484	--	--	--	1.8 J	24.3	--	0.12 J	--	--	--	2,050	--	244	4,240
06/27/13	--	529	--	--	--	1.2 J	24.9	--	0.23	--	--	--	761	--	177	2,330
07/23/13	7,790	1,150	--	--	--	4.2 J	83.2	--	0.85	--	--	1,600	4,360	--	523	7,960
08/22/13	--	1,530	--	--	--	2.0 J	42.5	--	<0.10	--	--	--	4,220	--	609	8,500
09/24/13	--	1,320	--	--	--	<2.4	25.2 J	--	<0.10	--	--	--	4,560	--	569	4,560
10/22/13	17,000	1,310	1,370	35.7	3,690	2.0 J	36.3	2,710	<0.10	4,190	--	1,440	4,980	--	565	9,290
12/03/13	--	1,380	--	--	--	0.90 J	26.40	--	0.14 J	--	--	--	3,350	--	552	7,370
12/19/13	--	1,180	--	--	--	1.6 J	27.8	--	0.24	--	--	--	2,930	--	584	7,480
01/21/14	9,080	1,550	--	--	--	1.0 J	17.5	--	0.15 J	--	--	941	2,380	--	569	6,800
02/25/14	--	1,390	--	--	--	1.4 J	29.9	--	<0.10	--	--	--	1,790	--	588	5,890
03/18/14	--	572	--	--	--	<0.48	11.4	--	<0.10	--	--	--	1,220	--	221	2,430
04/08/14	3,980	492	626	8.57	1,600	1.6 J	7.1 J	1,830	0.14 J	1,600	--	602	936	--	185	2,560
05/29/14	--	862	--	--	--	1.5 J	23.3	--	<0.10	--	--	--	1,490	--	330	4,070
06/24/14	--	657	--	--	--	<1.0	28.5	--	<0.10	--	--	--	3,540	--	418	5,790
07/24/14	7,690	1,050	--	--	--	<1.0	31.6	--	0.11 J	--	--	944	1,040	--	466	3,700
08/21/14	--	1,350	--	--	--	<1.0	21.0	--	<0.10	--	--	--	1,800	--	469	6,070
09/25/14	--	830	--	--	--	1.5 J	16.7	--	<0.10	--	--	--	3,350	--	421	5,610
10/14/14	6,360	605	1,130	42.5	2,600	<1.0	23.4	3,950	<0.10	2,460	--	1,120	2,680	--	401	5,470
11/25/14	--	604	--	--	--	<1.0	18.2	--	<0.10	--	--	--	2,120	--	329	4,540
12/18/14	--	571	--	--	--	1.7 J	26.5	--	<0.10	--	--	--	1,230	--	380	3,520
01/27/15	--	949	--	--	--	1.1J	21.1	--	<0.10	--	--	--	1,700	--	404	4,410
02/24/15	--	1,120	--	--	--	<1.0	18.6	--	<0.10	--	--	--	1,280	--	525	2,380
03/24/15	--	1,050	--	--	--	1.0 J	19.3	--	<0.10	--	--	--	2,610	--	444	6,440
04/21/15	8,590	943	1,430	32.3	3,120	<1.0	18.3	2,090	<0.10	3,620	--	967	1,380	--	563	4,590
05/19/15	--	864	--	--	--	<1.0	22.6	--	<0.10	--	--	--	2,350	--	470	6,160
06/23/15	--	931	--	--	--	<1.0	21.1	--	<0.10	--	--	--	3,880	--	539	7,260
07/23/15	--	1,030	--	--	--	<1.0	32.6	--	<0.10	--	--	--	1,120	--	714	4,960
08/31/15	--	915	--	--	--	<1.0	23.1	--	<0.10	--	--	--	913	--	519	4,180
09/22/15	--	1,040	--	--	--	<1.0	14.5	--	<0.10	--	--	--	5,290	--	416	8,660
10/13/15	9,000	1,240	1,430	56.8	3,590	<1.0	13.3	3,520	<0.10	3,890	--	1,190	2,310	--	460	5,700
11/12/15	--	945	--	--	--	<1.0	14.5	--	0.023 J	--	--	--	4,000	--	382	6,580
12/08/15	--	963	--	--	--	<1.0	14.4	--	<0.10	--	--	--	4,900	--	484	8,340
01/21/16	--	1,070	--	--	--	<10.0 D3	16.2 J D3	--	0.13 J	--	--	--	5,530	--	472	9,530
02/23/16	--	1,130	--	--	--	<1.0	25.0	--	<0.20 D3	--	--	--	5,690	--	572	9,040
03/16/16	--	811	--	--	--	<1.0	21.0 B	--	<0.10	--	--	--	5,130	--	402	8,100
04/12/16	7,940	1,010	1,240	77.7	2,510	<1.0	18.6	5,330	<0.18	3,030	<200 D3	1,680	3,850	320	436	6,230
05/19/16	--	1,240	--	--	--	<1.0	12.8	--	<0.18	--	--	--	4,140	--	432	7,080
06/21/16	--	1,110	--	--	--	<1.0	10.5 J	--	<0.13	--	--	--	3,670	--	394	6,850
07/19/16	9,380	1,140	--	--	--	<1.0	17.8	--	<0.13	--	--	1,400	2,970	--	538	6,590
08/16/16	--	700	--	--	--	<1.0	23.6	--	<0.13	--	--	--	2,460	--	526	7,260
09/22/16	--	500	--	--	--	<1.0	15.8	--	<0.13	--	--	--	2,290	--	228	4,220
10/04/16	8,640	1,050	1,520	37.0	3,310	<1.3	14.9	2,200	<0.13	4,470	<100 D3	1,140	1,740	122	426	5,150
11/15/16	9,400	1,060	--	--	--	<1.3	12.7 J	--	<0.13	--	--	--	3,260	--	400	6,940
12/08/16	--	862	--	--	--	<1.3	10.6 J	--	<0.13	--	--	--	1,570	--	238	3,950
01/19/17	6,580	866	--	--	--	<1.3	12.5 J	--	<0.13	--	--	1,010	1,690	--	459	4,530
02/16/17	--	979	--	--	--	<3.3 D3	18.3 J D3	--	<0.13	--	--	--	2,210	--	505	5,400
03/16/17	--	971	--	--	--	<6.6 D3	<21.6 D3	--	<0.13	--	--	--	2,330	--	386	5,030
04/11/17	6,990	653	1,110	21.8	2,860	<1.3	17.7	3,260	<0.13	3,420	<100 D3	1,130	2,110	74.0	330	4,480
05/25/17	--	590	--	--	--	<1.3	14.7	--	<0.13	--	--	--	2,080	--	464	4,860
06/22/17	--	783	--	--	--	<1.3	5.8 J	--	<0.50 D3	--	--	--	1,500	--	359	4,250
07/20/17	7,720	779	--	--	--	<1.3	18.4	--	<1.3 D3	--	--	1,070	2,370	--	412	5,810
08/29/17	--	892	--	--	--	<1.3	13.4	--	<1.3 D3	--	--	--	4,640	--	345	7,830
09/19/17	--	1,440	--	--	--	<1.3	11.2 J	--	<1.3 D3	--	--	--	4,210	--	421	7,880
10/03/17	9,780	1,590	1,610	32.9	3,700	<1.3	11.1 J	2,850	<1.3 D3	4,170	<100 D3	1,390	2,900	131	551	6,810
11/16/17	--	1,440	--	--	--	<1.3	15.8	--	<1.3 D3	--	--	--	5,690	--	478	8,840
12/14/17	--	1,360	--	--	--	<1.3	16.5	--	<1.3 D3	--	--	--	5,440	--	500	8,700

Table notes are provided on the last page of the data summary.

**Environmental Sampling Corporation**  
**ADVANCED DISPOSAL SERVICES SEVEN MILE CREEK LANDFILL**

**Sector 2 Leachate Analytical Data Summary**

Leachate Tank 2	PARAMETERS										
	Inorganics/Metals							Physical Parameters			
	Copper	Nickel	Phosphorus *	Silver	Zinc	Cyanide	Oil & Grease	pH (lab) *	pH (field)	Conductivity	Temp.
DATE	ug/L	ug/L	mg/L	ug/L	ug/L	mg/L	mg/L	s.u.	s.u.	umhos @ 25C	deg. C
01/31/13	118	410	12.6	<2.3	560	0.055 J	19.0	7.9	8.41	19,870	3.8
02/26/13	81.7	532	10.1	<3.4	760	0.050 J	42.6	8.1	8.14	73,999	8.9
03/18/13	111	443	11.3	<1.7	588	0.075 J	38.5	8.1	7.87	>20,000	18.9
04/23/13	57.8	197	5.7	<1.7	2,000	0.033 J	17.5	7.2	7.09	9,610	10.4
05/30/13	55.9	281	8.1	<1.7	4,000	0.026 J	29.7	7.4	7.86	15,190	23.8
06/27/13	76.8	192	6.3	<1.7	2,200	0.029 J	27.3	7.8	7.87	12,140	29.3
07/23/13	144	543	10.0	<3.4	11,400	<0.023	105	7.9	8.08	>20,000	26.8
08/22/13	167	555	13.1	<3.4	4,050	0.076 J	93.0	7.9	8.20	>20,000	24.7
09/24/13	43.1 J	552	12.3	<8.5	2,760	0.069 J	100	8.0	7.73	>20,000	21.7
10/22/13	86.0	530	12.7	<3.4	2,840	0.042 J	62.7	8.0	7.99	>20,000	15.5
12/03/13	38.1	498	13.6	2.5 J	2,280	0.044 J	50.3	8.0	8.25	>20,000	10.0
12/19/13	51.8	525	14.4	<1.7	2,010	0.042 J	64.6	7.9	7.45	10,310	9.5
01/21/14	45.3	506	14.8	1.8 J	1,550	0.050 J	48.1	8.0	8.11	19,870	3.8
02/25/14	42.3	603	13.8	2.2 J	2,840	0.056 J	40.0	8.1	8.32	19,920	14.1
03/18/14	47.4	243	6.4	<1.7	622	0.042 J	45.5	7.4	7.82	13,830	13.2
04/08/14	69.2	258	5.6	<3.2	2,840	<0.060	24.6	7.6	7.23	9,420	18.4
05/29/14	86.4	496	13.6	<3.2	3,280	<0.060	36.1	7.6	7.14	9,810	NA
06/24/14	97.3	616	11.2	<3.2	5,810	<0.060	46.5	7.7	7.77	18,980	27.4
07/24/14	73.8	571	11.6	<3.2	2,310	<0.060	35.8	8.2	7.84	18,940	27.8
08/21/14	35.7	427	14.1	<3.2	828	0.077 J	43.2	7.8	7.88	19,890	25.0
09/25/14	34.4	376	12.1	<3.2	1,000	<0.12	37.8	7.8	7.82	19,760	25.4
10/14/14	51.9	521	--	<3.2	2,500	<0.060	42.4	--	7.78	18,970	17.7
11/25/14	67.4	497	--	<3.2	1,820	<0.12	16.7	--	7.74	19,710	23.2
12/18/14	94.9	446	--	<3.2	1,810	<0.060	20.5	--	7.49	18,290	17.2
01/27/15	29.5	455	--	<3.2	1,330	<0.060	27.8	--	7.24	14,070	16.8
02/24/15	31.1	531	--	3.5 J	834	<0.060	21.3	--	7.41	14,190	16.9
03/24/15	34.4	671	--	<3.2	1,630	<0.060	27.4	--	7.43	14,230	15.2
04/21/15	39.8	519	--	<3.2	1,180	0.035 J	32.2	--	7.59	14,390	17.4
05/19/15	305	627	--	<3.2	1,410	<0.060	4.2 J	--	7.47	14,170	14.9
06/23/15	42.7	784	--	4.6 J	1,750	<0.060	44.7	--	7.59	14,080	15.3
07/23/15	41.2	666	--	3.8 J	1,280	<0.060	32.4	--	7.19	13,040	20.1
08/31/15	42.1	556	--	<3.2	795	0.068 J	22.0	--	7.13	12,740	20.1
09/22/15	24.6	964	--	<3.2	2,390	<0.060	56.0	--	7.17	11,840	20.0
10/13/15	26.8	705	--	<3.2	2,470	<0.060	4.4 J	--	7.40	19,000	16.8
11/12/15	26.0	746	--	8.9 J	1,570	<0.060	<0.87	--	7.30	18,700	13.9
12/08/15	26.1	1,070	--	<3.2	3,340	<0.060	2.0 J	--	7.31	18,640	11.8
01/21/16	57.2 J D3	989	--	<31.6 D3	3,300	<0.041 D3	3.4 B	--	7.21	18,400	12.9
02/23/16	51.9	1,140	--	<3.2	5,820	0.045 J D3	20.0	--	7.19	18,240	13.7
03/16/16	109	827	--	<3.2	4,500	0.048 J D3	1.2 J B	--	7.07	17,870	13.9
04/12/16	28.8	752	--	<3.2	2,750	<0.041 D3	<1.1	--	7.02	6,710	12.6
05/19/16	21.0	729	--	<3.2	2,060	<0.041 D3	<1.1	--	7.54	19,980	26.0
06/21/16	22.7	665	--	<3.2	1,820	0.074 J D3	1.4 J	--	7.58	19,740	25.0
07/19/16	33.6	773	--	<3.2	1,920	<0.041 D3	9.0	--	7.96	19,960	22.4
08/16/16	34.3	830	--	<3.2	2,540	<0.041 D3	5.4	--	7.84	19,980	23.5
09/22/16	30.1	387	--	<3.2	1,500	0.022 J D3	6.7	--	7.62	17,430	23.6
10/04/16	20.9	550	--	<3.3	1,160	0.049 J D3	34.5	--	7.69	18,370	22.4
11/15/16	17.8 J	549	--	<3.3	1,280	<0.041 D3	12.4	--	7.74	16,870	18.9
12/08/16	19.6 J	410	--	<3.3	1,130	0.051 J D3	22.0 M1	--	7.89	17,560	11.2
01/19/17	32.3	482	--	<3.3	1,290	0.054 J D3	16.0	--	7.92	17,920	14.6
02/16/17	32.4 J D3	566	--	<8.3 D3	1,610	0.048 J D3	28.4	--	7.90	17,420	15.1
03/16/17	50.5 J D3	548	--	<16.6 D3	2,300	<0.041 D3	2.1 J	--	7.84	16,890	14.6
04/11/17	24.8	432	--	<3.3	1,370	0.041 J D3	6.4	--	7.84	17,220	14.3
05/25/17	35.7	442	--	<3.3	1,870	0.047 J D3	24.7	--	7.84	17,170	18.5
06/22/17	15.1 J	440	--	<3.3	846	<0.041 D3	6.5	--	7.49	17,040	21.7
07/20/17	35.6	416	--	<3.3	1,530	0.048 J D3	41.6	--	7.13	7,030	21.4
08/29/17	15.4 J	439	--	<3.3	1,030	0.045 J D3	68.0	--	7.69	16,410	19.3
09/19/17	32.7	458	--	<3.3	956	0.042 J D3	53.9	--	8.19	>20,000	18.3
10/03/17	17.5 J	632	--	<3.3	940	0.057 J D3	44.6	--	8.11	>20,000	18.1
11/16/17	27.5	604	--	<3.3	1,630	0.066 J D3	33.6	--	8.01	>20,000	16.9
12/14/17	23.5	678	--	<3.3	2,200	0.038 J D3	5.2	--	7.39	18,430	14.3

Table notes are provided on the last page of the data summary.

**Environmental Sampling Corporation**  
**ADVANCED DISPOSAL SERVICES SEVEN MILE CREEK LANDFILL**

**Sector 2 Leachate Analytical Data Summary**

Leachate Tank 2	PARAMETERS											PCBs	SVOCs	
	Volatile Organic Compounds (VOCs)													
	1,4-Dichloro-benzene	Acetone	Ethyl-benzene	Methylene Chloride	MEK (2-Butanone)	Tetra-hydrofuran	Tetra-chloro-ethene	Toluene	m&p-Xylene	o-Xylene	Total PCBs	m-&p-Cresol	Phenol	
DATE	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
01/31/13	<47.5	8,310	<27.0	<21.5	6,820	1,570	<22.5	<33.5	<90.0	<41.5	--	--	--	
02/26/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/18/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/23/13	<47.5	2,910	<27.0	<21.5	<215	940	29.8 J	60.3	<90.0	<41.5	<3.0	1,570 J	1,270 J	
05/30/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/27/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/23/13	<43.4	10,500	<50.0	<35.9	8,010	1,440	<47.2	<43.9	<81.7	<50.0	--	--	--	
08/22/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/24/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/22/13	<43.4	6,480	<50.0	<35.9	5,840	1,190	<47.2	<43.9	<81.7	<50.0	<2.5	3,010	742 J	
12/03/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/19/13	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/21/14	<17.4	7,410	<20.0	<14.3	5,800	1,680	<18.9	<17.5	<32.7	<20.0	--	--	--	
02/25/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/18/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/08/14	<5.0	1,320	9.1 J	5.0 J	964	879	<5.0	21.1	15.0 J	7.6 J	0.29 J	365	263	
05/29/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/24/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/24/14	<5.0	2,460	<5.0	<2.3	1,560	1,100	<5.0	7.6 J	<10.0	<5.0	--	--	--	
08/21/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/25/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/14/14	<12.5	3,400	16.3 J	<5.8	1,630	1,060	<12.5	53.4	28.2 J	<12.5	<0.24	--	--	
11/25/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/14	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/27/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/24/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/24/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/21/15	11.5	3,460	10.5	<2.3 B	3,890	1,620	<5.0	37.3	28.3	<5.0	<2.5	945	755	
05/19/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/23/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/23/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/31/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/22/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/13/15	<20.0	3,640	<20.0	<9.3	3,090	1,180	<20.0	34.2 J	<40.0	<20.0	<0.25	--	--	
11/12/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/08/15	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/21/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/23/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/16/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/12/16	<50.0	16,300	<50.0	<23.3	13,200	1,820	<50.0	51.1 J	<100	<50.0	<2.5	2,040 J	506 J D3	
05/19/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/21/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/19/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/16/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/22/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/04/16	<20.0	3,810 B	<20.0	<9.3	3,610	1,330	<20.0	31.7 J	<40.0	<20.0	<0.24	--	--	
11/15/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/08/16	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/19/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/16/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/16/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/11/17	<50.0	5,800	<50.0	<23.3	6,850	1,480	<50.0	<100	<50.0	<50.0	<2.5	1,740	<171 D3	
05/25/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/22/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/20/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/29/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/19/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/03/17	<50.0	6,820	<50.0	<23.3	6,320	1,410	<50.0	<50.0	<100	<50.0	<5.0	--	--	
11/16/17	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/14/17	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table notes are provided on the last page of the data summary.

**Environmental Sampling Corporation**  
**ADVANCED DISPOSAL SERVICES SEVEN MILE CREEK LANDFILL**

**Sector 2 Leachate Analytical Data Summary**

Leachate Tank 2	PARAMETERS									
	Volatile Fatty Acids (VFAs)									
	Lactic Acid	Acetic Acid	Propionic Acid	Formic Acid	Butyric Acid	Pyruvic Acid	i-Pentanoic Acid	Pentanoic Acid	i-Hexanoic Acid	Hexanoic Acid
DATE	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
01/31/13	3.8 J	920	540	33	280	29	36	84	<1.3	83
02/26/13	--	--	--	--	--	--	--	--	--	--
03/18/13	--	--	--	--	--	--	--	--	--	--
04/23/13	--	--	--	--	--	--	--	--	--	--
05/30/13	--	--	--	--	--	--	--	--	--	--
06/27/13	--	--	--	--	--	--	--	--	--	--
07/23/13	<50	970	720	48	340	35	26	200	<2.9	89
08/22/13	--	--	--	--	--	--	--	--	--	--
09/24/13	--	--	--	--	--	--	--	--	--	--
10/22/13	--	--	--	--	--	--	--	--	--	--
12/03/13	--	--	--	--	--	--	--	--	--	--
12/19/13	--	--	--	--	--	--	--	--	--	--
01/21/14	5.0 J	510	410	44	150	31	32	40	<2.9	44 J
02/25/14	--	--	--	--	--	--	--	--	--	--
03/18/14	--	--	--	--	--	--	--	--	--	--
04/08/14	--	--	--	--	--	--	--	--	--	--
05/29/14	--	--	--	--	--	--	--	--	--	--
06/24/14	--	--	--	--	--	--	--	--	--	--
07/24/14	1.8 J	210	140	17	49	9.0 J	12 J	16	40	<12
08/21/14	--	--	--	--	--	--	--	--	--	--
09/25/14	--	--	--	--	--	--	--	--	--	--
10/14/14	--	--	--	--	--	--	--	--	--	--
11/25/14	--	--	--	--	--	--	--	--	--	--
12/18/14	--	--	--	--	--	--	--	--	--	--
01/27/15	--	--	--	--	--	--	--	--	--	--
02/24/15	--	--	--	--	--	--	--	--	--	--
03/24/15	--	--	--	--	--	--	--	--	--	--
04/21/15	8.8 J	310	170	17	78	13 J	14 J	21	<20	19 J
05/19/15	--	--	--	--	--	--	--	--	--	--
06/23/15	--	--	--	--	--	--	--	--	--	--
07/23/15	--	--	--	--	--	--	--	--	--	--
08/31/15	--	--	--	--	--	--	--	--	--	--
09/22/15	--	--	--	--	--	--	--	--	--	--
10/13/15	--	--	--	--	--	--	--	--	--	--
11/12/15	--	--	--	--	--	--	--	--	--	--
12/08/15	--	--	--	--	--	--	--	--	--	--
01/21/16	--	--	--	--	--	--	--	--	--	--
02/23/16	--	--	--	--	--	--	--	--	--	--
03/16/16	--	--	--	--	--	--	--	--	--	--
04/12/16	0.47 J	1,000	590	2.2 J	470	36	29	170	4.2 J	170
05/19/16	--	--	--	--	--	--	--	--	--	--
06/21/16	--	--	--	--	--	--	--	--	--	--
07/19/16	--	--	--	--	--	--	--	--	--	--
08/16/16	--	--	--	--	--	--	--	--	--	--
09/22/16	--	--	--	--	--	--	--	--	--	--
10/04/16	--	--	--	--	--	--	--	--	--	--
11/15/16	--	--	--	--	--	--	--	--	--	--
12/08/16	--	--	--	--	--	--	--	--	--	--
01/19/17	--	--	--	--	--	--	--	--	--	--
02/16/17	--	--	--	--	--	--	--	--	--	--
03/16/17	--	--	--	--	--	--	--	--	--	--
04/11/17	0.91 J	620 B	540	20 B	70	20	15	51	8.1 J	13 J
05/25/17	--	--	--	--	--	--	--	--	--	--
06/22/17	--	--	--	--	--	--	--	--	--	--
07/20/17	--	--	--	--	--	--	--	--	--	--
08/29/17	--	--	--	--	--	--	--	--	--	--
09/19/17	--	--	--	--	--	--	--	--	--	--
10/03/17	--	--	--	--	--	--	--	--	--	--
11/16/17	--	--	--	--	--	--	--	--	--	--
12/14/17	--	--	--	--	--	--	--	--	--	--

Notes:

mg/L = milligrams per liter

ug/L = micrograms per liter

s.u. = standard units

J = result value was between the laboratory limit of detection and limit of quantitation.

< = The analyte was not detected at a concentration at or above the method detection limit (i.e. < MDL)

-- = Analysis was not required.

In accordance with the April 19, 2005 Conditional Plan of Operation, semi-annual monitoring is required at the leachate tank in April and October.

Additional monitoring was conducted in accordance with the Organic Stability Plan and the wastewater treatment plant monitoring requirements.

The June 2013 oil & grease sample was collected on July 2, 2013.

B = Analyte was detected in the Trip Blank or associated method blank

ND = Analyte was not detected

\* = No longer analyzed due to requirement change in 2014

## = Analytes were added due to a requirement change in 2016.

M1 = Matrix spike recovery exceeded QC limits, accepted based on laboratory control sample recovery.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

CLIENT:	ADVANCED DISPOSAL SERVICES	PRE:	NSD
PROJECT:	SEVEN MILE CREEK LF FEASIBILITY	CHK:	TD
SUBJECT:	LEACHATE GENERATION	DATE:	7/12/19
PROJ. NO.:	180720		

## Appendix P

### Seven Mile Creek Landfill - Feasibility Report Proposed Sector 2 Northeast Expansion Leachate Generation Calculations

**Purpose:** To estimate the daily volume of leachate that will be collected during operation and after closure at Seven Mile Creek Landfill (SMCL) including: the currently approved Sector 2 and the proposed Sector 2 Northeast Expansion. To determine the minimum capacity of leachate storage needed to contain the volume of leachate generated over a 4-day period.

(Note: the existing 100,000 gallon above-ground storage tank (AST) will provide adequate capacity for the existing and proposed facility)

**Approach:** Two conditions have been evaluated for the SMCL proposed Sector 2 Northeast Expansion leachate generation. The first condition considers all landfill areas are fully capped which would generate the least amount of leachate. The second condition is considered the worst-case scenario which is the maximum open, uncapped area at one time. The phase identified as having the most open area will be the worst-case scenario for leachate generation, and therefore result in the most conservative approach to determining the maximum amount of leachate storage required during any 4-day time period during the operational life of the proposed facility. Figure P-1 identifies the open versus closed areas of SMCL. Leachate generation rates established in NR 512.12(3) are used to estimate the leachate generation volume.

NR 512.12(3) establishes the following leachate generation rates:

- 6 inches/year for all unclosed areas that have a composite liner
- 1 inch/year for all closed areas that have a composite cover

Leachate Generation Rate (gallons/day) = Area (acres) x NR 512 Generation Rate (in/yr) x 43,560 (sf/acre) / 12 (in/ft) x 7.48 (gal/cf) / 365 (day/yr)

**Assumptions:**

All operating conditions are assumed to be between the two leachate generation conditions outlined in the approach. The fully closed scenario includes the currently approved Sector 2 landfill (79.48 acres) and proposed Sector 2 Northeast Expansion (12.54 acres) areas; for a total closed area of 92.02 acres (1-inch per year infiltration).

## CALCULATION SHEET

SHEET 2 OF 2



CLIENT:	ADVANCED DISPOSAL SERVICES	PRE:	NSD
PROJECT:	SEVEN MILE CREEK LF FEASIBILITY	CHK:	TD
SUBJECT:	LEACHATE GENERATION	DATE:	7/12/19
PROJ. NO.:	180720		

The worst-case scenario assumes the following: Closed areas include the currently approved Sector 2 final cover area (17.83 acres), the Phase 3A final cover area being constructed in 2019 (7.00-acres), the Phase 4 final cover to be constructed ahead of Phase 14 liner (5.42-acres) and the existing Sector 2 impermeable rain cover area (16.21 acres); for a total of 46.46 acres closed (1-inch per year infiltration). Open areas include the currently approved Sector 2 landfill liner at full build-out (79.48 acres) minus the closed areas listed above (46.46 acres) plus the proposed Sector 2 Northeast Expansion area (12.54 acres); for a total open area of 45.56 acres (6 inches per year infiltration).

### Calculations:

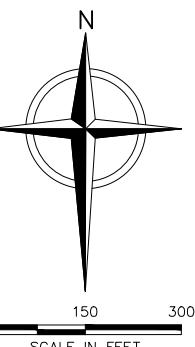
Landfill Cover Status	Area in Cover Status (acres)	Infiltration (inches/year)	Leachate Generation Rate (gallons/day)
<b>Worst-case</b>			
Open Area	45.56	6	20,335
Closed	46.46	1	3,455
<b>Total</b>			<b>23,790</b>
<b>Fully Capped</b>			
Closed	92.02	1	<b>6,845</b>

**Results:** The maximum leachate generation rate is 23,790 gallons per day. The resulting 4-day storage volume required is 95,160 gallons. Therefore, the existing 100,000 gallon leachate AST will be adequate for the proposed facility.

During post-closure conditions, the calculated leachate generation rate for the entire site is 6,845 gallons per day.

**LEGEND**

- PROPERTY BOUNDARY
- SOLID WASTE BOUNDARY
- CELL DELINEATION
- RAIN COVER AREA
- FINAL COVER AREA
- PROPOSED FINAL COVER DELINEATION





# City of Chippewa Falls

DEPARTMENT OF PUBLIC UTILITIES  
30 WEST CENTRAL STREET, ROOM 209  
CHIPPEWA FALLS, WISCONSIN 54729-2467

Dean Marten  
Advanced Disposal  
8001 Olson Drive  
Eau Claire WI54703

October 31, 2014

To whom it may concern,  
This letter is intended to indicate that the City of Chippewa Falls Wastewater Treatment Plant does and will into the foreseeable future receive/ treat leachate from Advanced Disposal's 7 Mile Landfill. Our treatment facility currently has sufficient excess capacity to receive and treat leachate that meets Chippewa Falls Municipal Code Chapter 13 criteria.

*George Hobbs 10/31/14*  
George Hobbs  
Wastewater Supervisor  
City of Chippewa Falls  
715-726-2745



# Wastewater Billout

**Rice Lake Utilities**  
320 W Coleman St  
Rice Lake WI 54868  
715-234-7004

Date: 4/4/2019

Bill to:	<u>7 Mile Creek Landfill</u>	Bill For:	<u>Leachate</u>
	<u>8001 Olson Dr.</u>		<u></u>
	<u>Eau Claire, WI 54701</u>		<u></u>

**Thank you - we appreciate your business!!**

Sales Tax 5.5%

Total

Total \$ 1,547.55

2114501749 6444000.2400.700  
Rec #6520

DEPARTMENT OF PUBLIC UTILITIES  
 CITY OF CHIPPEWA FALLS  
 30 WEST CENTRAL ST., ROOM 200 • CHIPPEWA FALLS, WI 54729-2467  
 (715) 726-2741



SERVICE AT	DATE	AMOUNT		RETURN SERVICE REQUESTED	PRESORTED FIRST CLASS MAIL U.S. POSTAGE PAID PERMIT # 1401
1125 RIVER ST W	6/07/2019	CHARGES	PREVIOUS METER READING PRESENT	USAGE	
PREVIOUS BAL.				22,082.90	
PAYMENTS				20,886.95-	
ADJUSTMENTS				1,195.95-	
				18,308.78	

PLEASE RETURN THIS STUB WITH YOUR PAYMENT

AMOUNT DUE NOW	ACCOUNT NUMBER
\$ 18,308.78	900-0400-00-01
AMOUNT PAID	AFTER PAY \$
	7/01/2019 18,491.87

AFTER 7/01/2019 PAY \$	18,491.87	AMOUNT DUE NOW
		\$ 18,308.78
READING DATES		ADVANCED DISPOSAL
PREVIOUS	4/30/2019	8001 OLSON DR
PRESENT	5/31/2019	EAU CLAIRE WI 54703-9727
900-0400-00-01		
ACCOUNT NUMBER		

644000.2400.700 = 12,992.52  
 292050.0000.000 = 5,316.26

Rec # 6745

2114501910